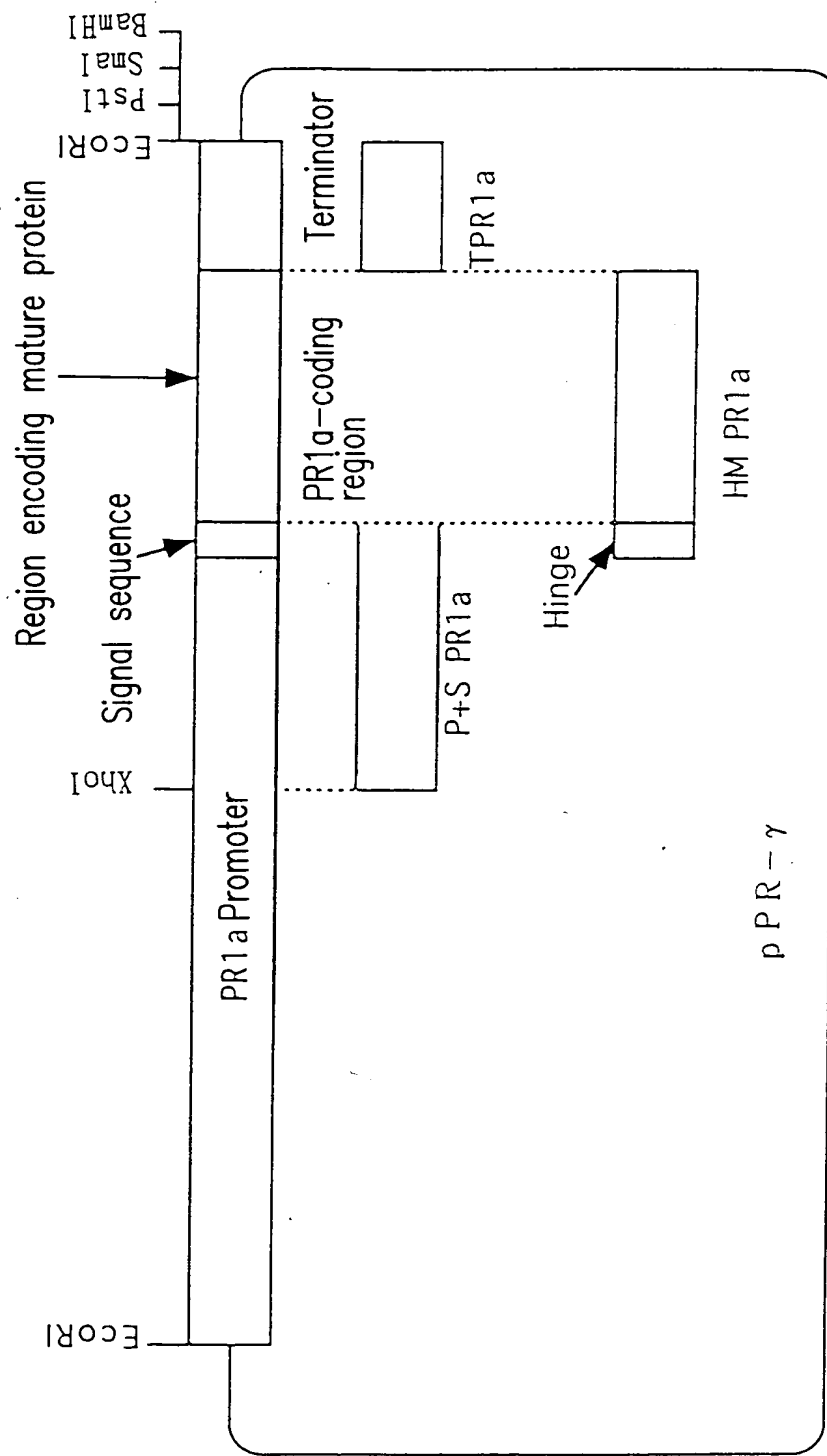


FIG. 1



Part of sequence of PR1a gene
(In the periphery of 3'-end of signal sequence)

Leu Phe Leu Val Ile Ser His Ser Lys Arg Ala **Glu**
TTA TTC CTA GTA ATA TCC CAC TCT TGC CGT GCC CAA
AAT AAG GAT CAT TAT AGG GTG AGA ACG GCA CGG GTT

3'-T TAT AGG GTG AGG ACG tct CGG G-5'
Pst I

Signal sequence → Mature protein

SPR1a31

Bases represented by small letters show a portion in which mutation is introduced.

FIG. 3

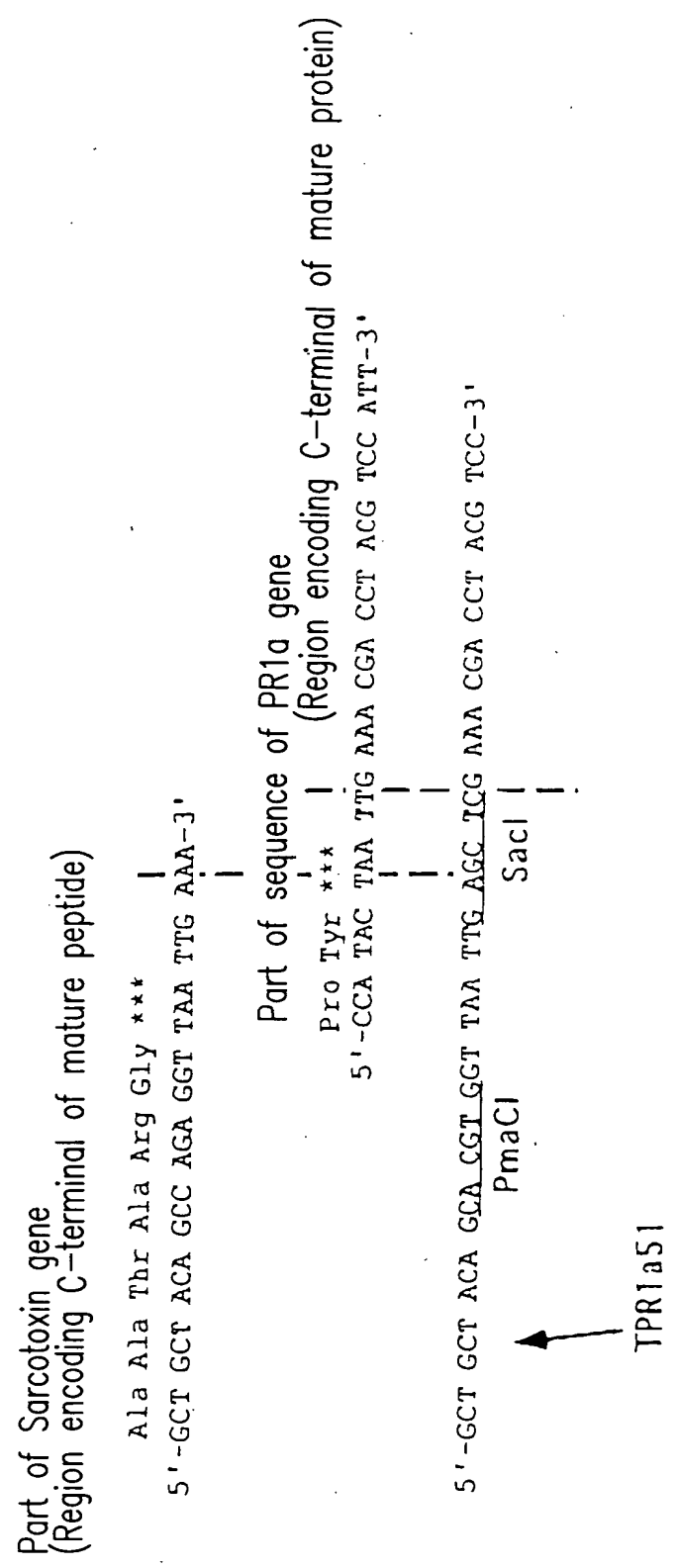
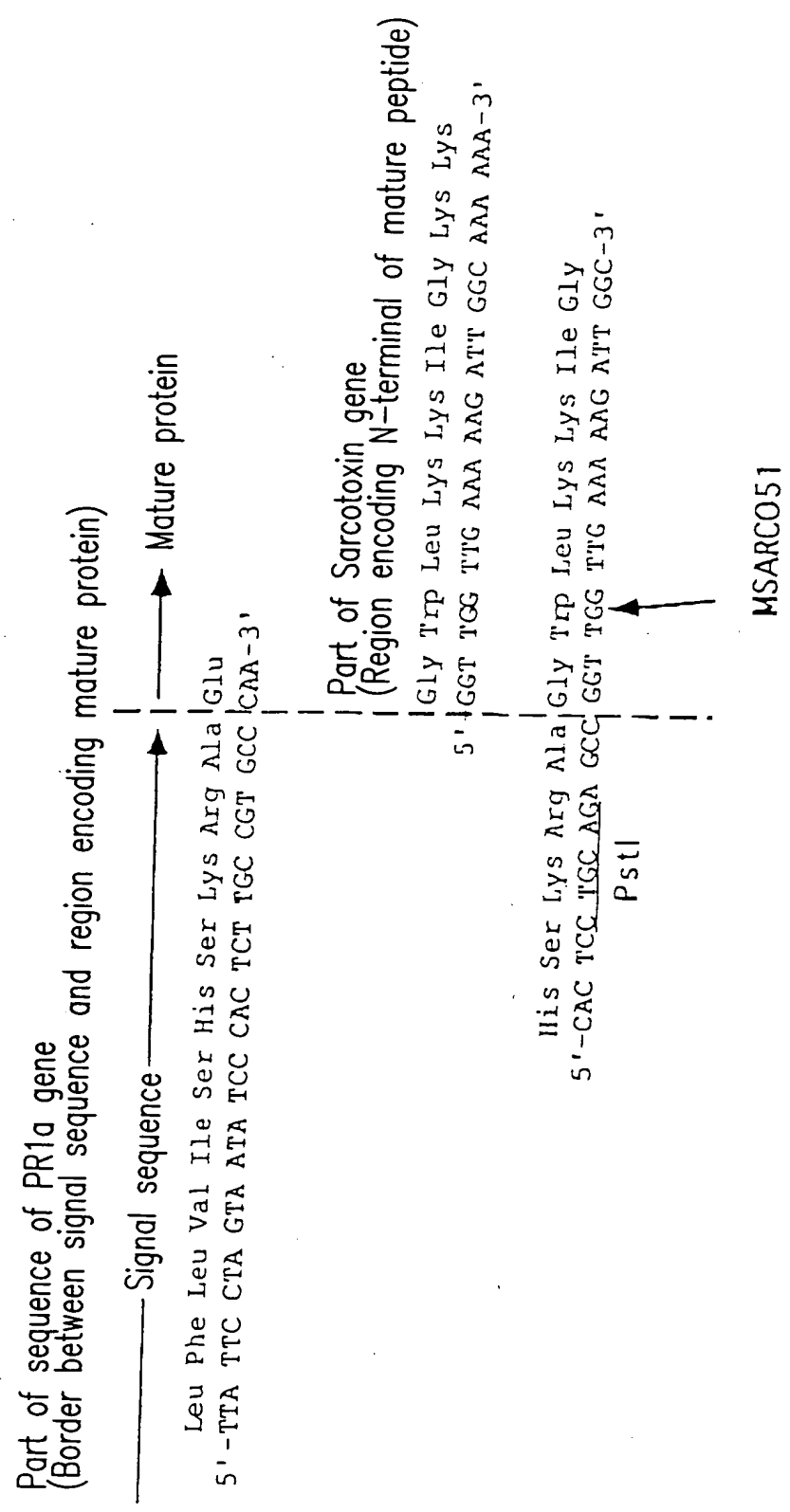


FIG. 4



Part of Sarcotoxin gene
(Region encoding C-terminal of mature peptide)

MSARCO31

FIG. 6

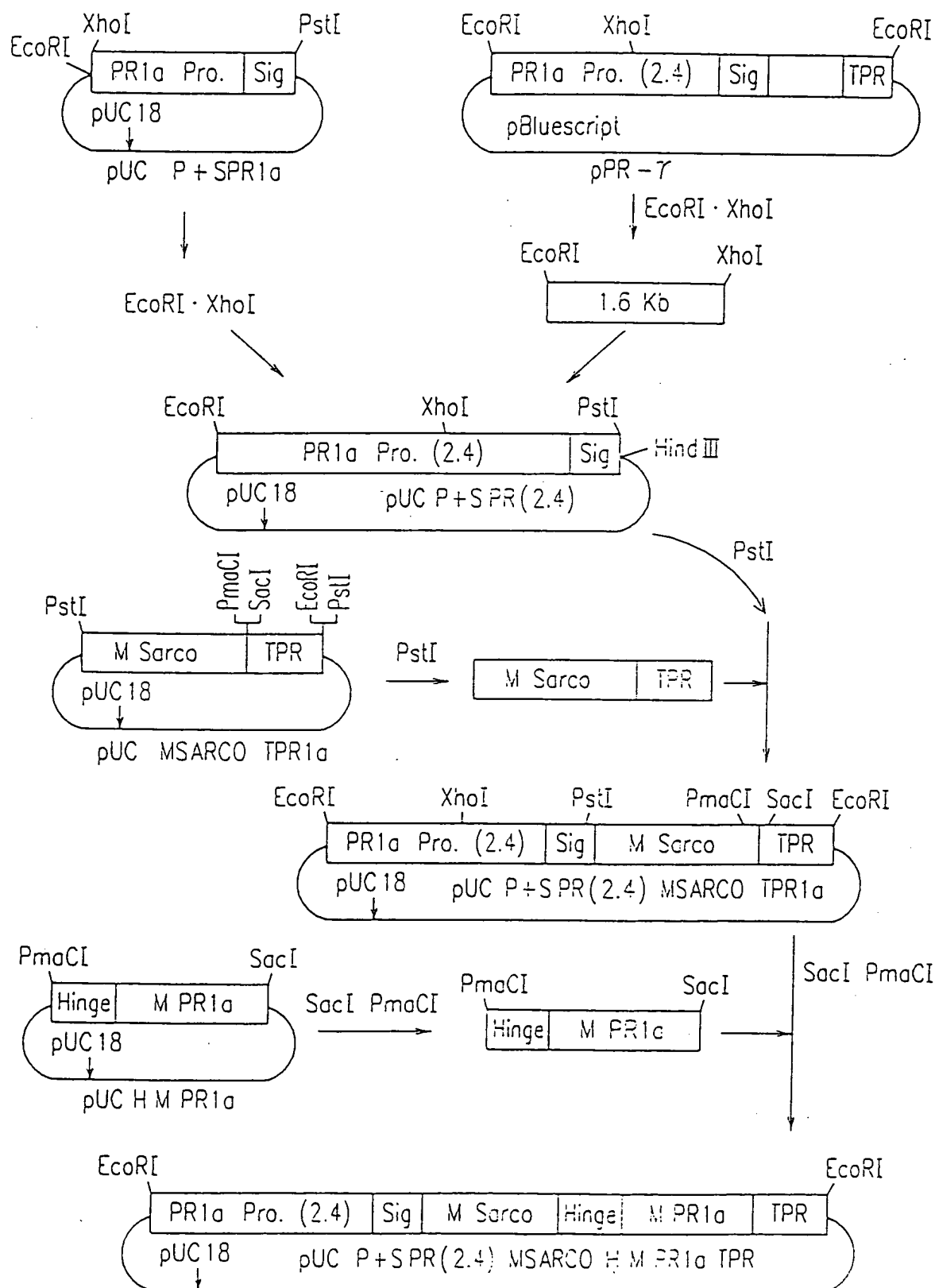


FIG. 7

Direction of binary vector pTRA415 is changed

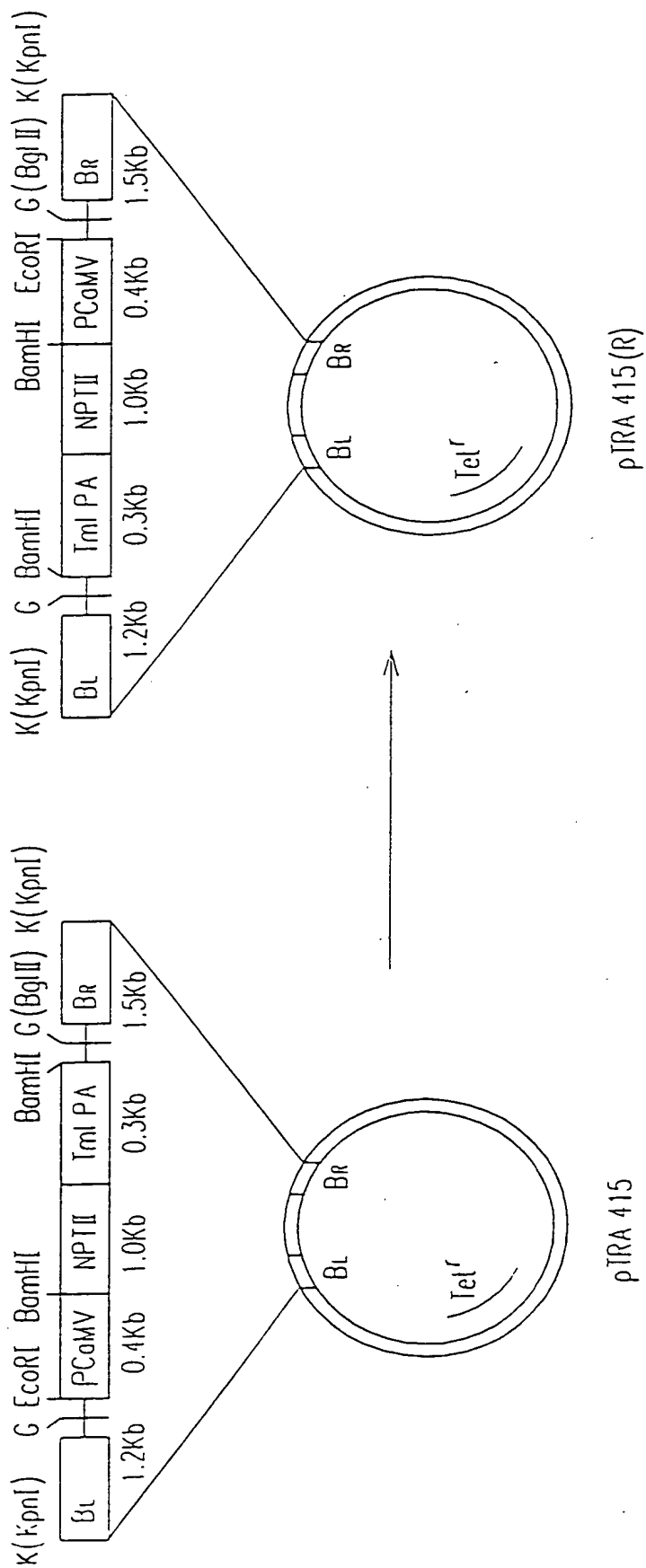


FIG. 8

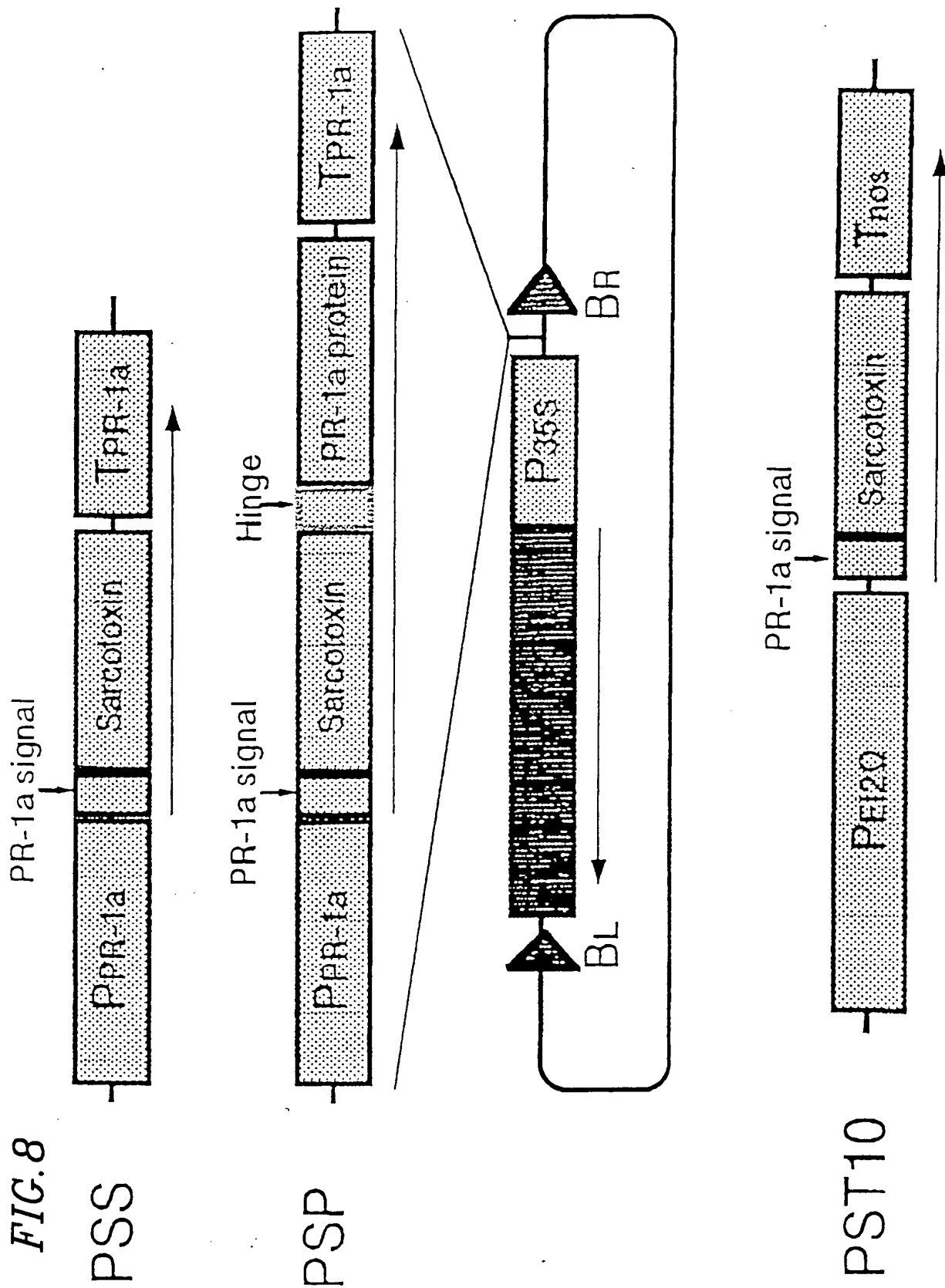


FIG. 9

	A. Anti-Sarcotoxin antibody	B. Anti-PR1a antibody
Introduced gene	<p>Transformed individuals</p> <p>PSP PST10 PSP</p> <p>119 121 127 / 119 121 127</p>	<p>Transformed individuals</p> <p>PSP PST10 PSP</p> <p>119 121 127 / 119 121 127</p>
SA treatment	<p>- - - + + + +</p>	<p>- - - - + + + +</p>
	<p>↓ Fusion Protein</p> <p>↓ PR1a</p> <p>↓ Sarcotoxin</p>	<p>↓ Fusion Protein</p> <p>↓ PR1a</p> <p>↓ Sarcotoxin</p>

FIG. 10

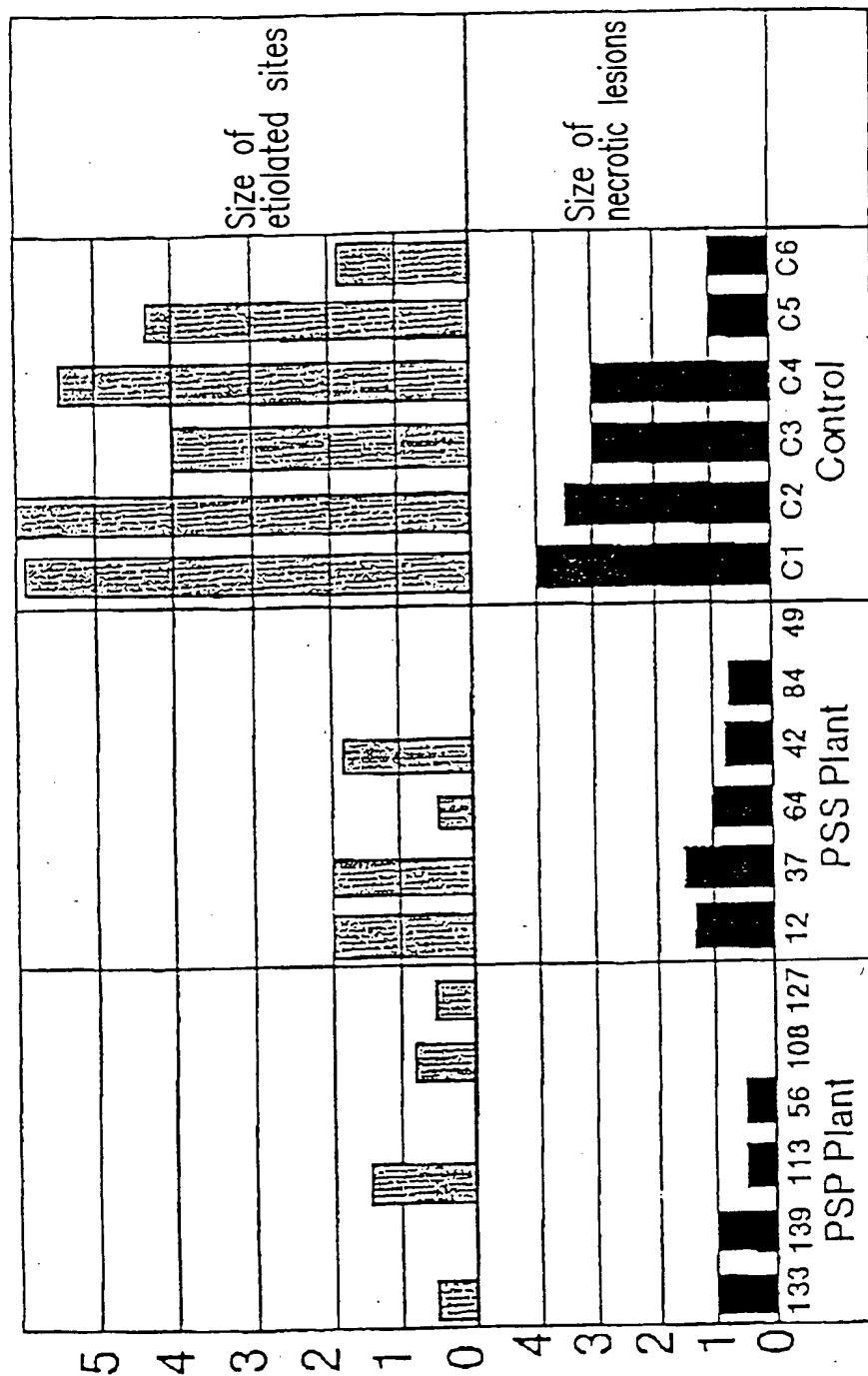


FIG. 11

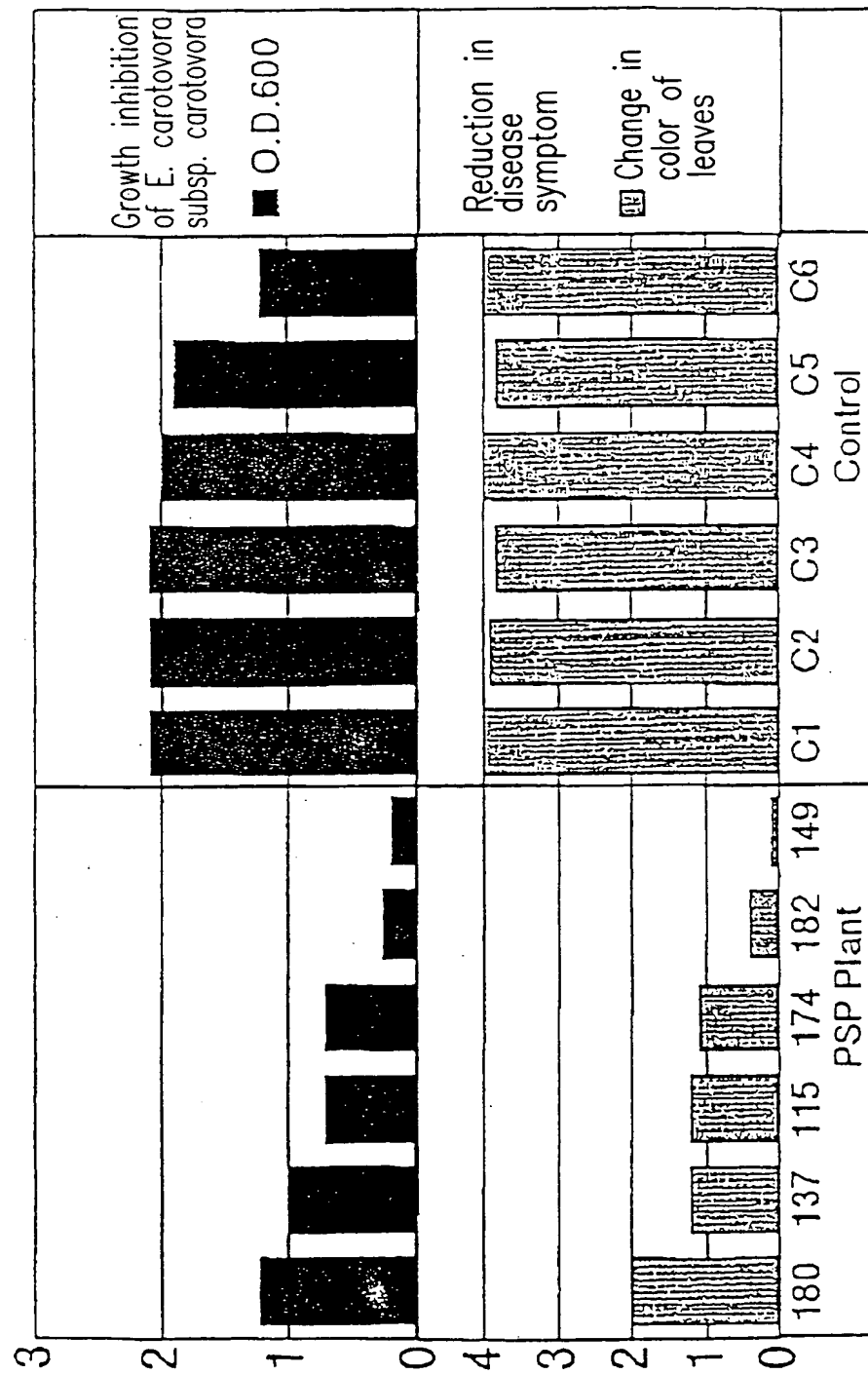


FIG. 12

F.oxy.F-3

Added amount of Sarcotoxin $\mu\text{g/ml}$		Culture time [h]				
		0	12	24	36	48
0	0.0707828	0.283131	0.786475	1.3291428	2.2729128	
0	0.0707828	0.1966188	0.786475	1.3291428	2.2729128	
0	0.0707828	0.283131	0.9516348	1.541491	2.548179	
50	0.0707828	0.283131	0.786475	1.7695688	2.548179	
50	0.0707828	0.283131	0.786475	1.541491	2.2729128	
50	0.0707828	0.1966188	0.503344	1.132524	1.7695688	
200	0.0707828	0.283131	0.786475	1.541491	2.2729128	
200	0.0707828	0.1966188	0.503344	0.9516348	1.7695688	
400	0.0707828	0.283131	0.786475	1.3291428	2.013376	
400	0.0707828	0.283131	0.6370448	0.9516348	1.541491	

Standard deviation

Added amount of Sarcotoxin $\mu\text{g/ml}$		Culture time [h]				
		0	12	24	36	48
0	0	0.0499479	0.095355	0.1225993	0.158925	
50	0	0.0499479	0.1634658	0.3227743	0.3948334	
200	0	0.0611734	0.2002039	0.4170914	0.355918	
400	0	0	0.1056631	0.2669385	0.3336731	

Average

Added amount of Sarcotoxin $\mu\text{g/ml}$		Culture time [h]				
		0	12	24	36	48
0	0.0707828	0.2542936	0.8415283	1.3999255	2.3646682	
50	0.0707828	0.2542936	0.692098	1.4811946	2.1968868	
200	0.0707828	0.2398749	0.6449095	1.2465629	2.0212408	
400	0.0707828	0.283131	0.7117599	1.1403888	1.7774335	

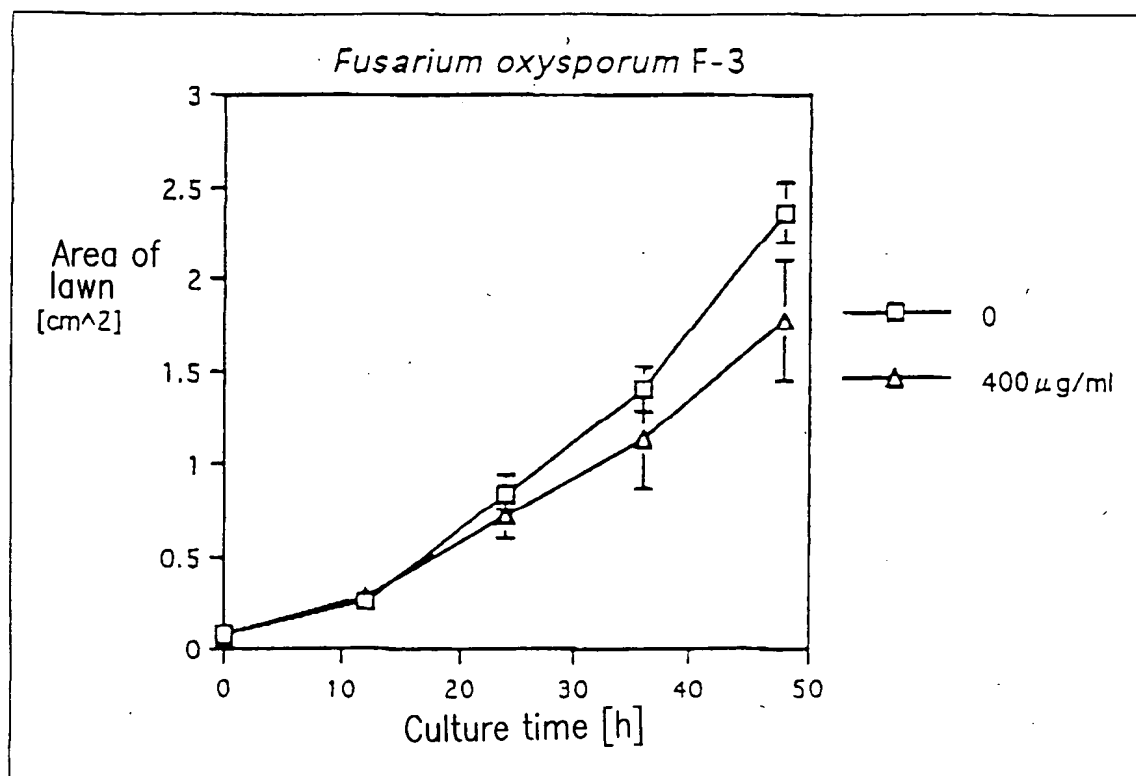


FIG. 13

R.sola.AG-4 1272

Added amount of Sarcotoxin $\mu\text{g/ml}$		Culture time [h]			
	0	6	11	13	
0	0.07078275	0.38537275	1.541491	2.548179	
0	0.07078275	0.38537275	2.013376	2.408579688	
0	0.07078275	0.38537275	2.013376	2.548179	
50	0.07078275	0.38537275	0.786475	0.709793688	
50	0.07078275	0.63704475	1.541491	2.013376	
200	0.07078275	0.38537275	0.503344	0.63704475	
200	0.07078275	0.38537275	0.786475	0.786475	
400	0.07078275	0.38537275	0.503344	0.568228188	
400	0.07078275	0.38537275	0.786475	0.709793688	

Standard deviation

Added amount of Sarcotoxin $\mu\text{g/ml}$	Culture time [h]			
	0	6	11	13
0	0	0	0.272442932	0.080597701
50	0	0.177958978	0.533876934	0.921771893
200	0	0	0.20020385	0.105663143
400	0	0	0.20020385	0.100101925

Average

Added amount of Sarcotoxin $\mu\text{g/ml}$	Culture time [h]			
	0	6	11	13
0	0.07078275	0.38537275	1.856081	2.501645896
50	0.07078275	0.51120875	1.163983	1.361584844
200	0.07078275	0.38537275	0.6449095	0.711759875
400	0.07078275	0.38537275	0.6449095	0.639010938

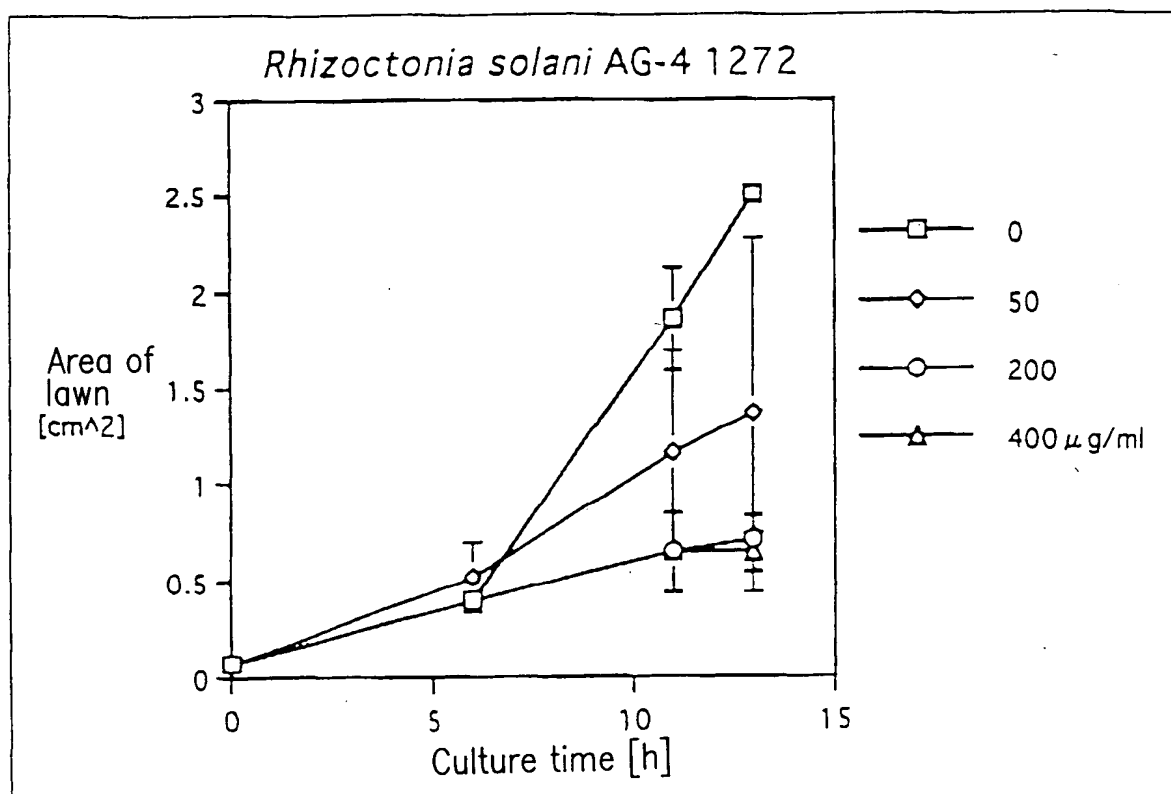


FIG. 14

R. solani. *Rhizoctonia solani*

Added amount of Sarcotoxin $\mu\text{g/ml}$	Culture time [h]		
	0	6	18
0	0.07078275	0.38537275	2.83917475
0	0.07078275	0.503344	3.46835475
0	0.07078275	0.283131	2.548179
50	0.07078275	0.503344	2.013376
50	0.07078275	0.503344	1.32914275
200	0.07078275	0.38537275	1.132524
200	0.07078275	0.63704475	1.32914275
400	0.07078275	0.283131	0.503344
400	0.07078275	0.503344	0.63704475

Standard deviation

Added amount of Sarcotoxin $\mu\text{g/ml}$	Culture time [h]		
	0	6	18
0	0	0.110200088	0.470331339
50	0	0	0.483825971
200	0	0.177958978	0.139030451
400	0	0.155714106	0.094540707

Average

Added amount of Sarcotoxin $\mu\text{g/ml}$	Culture time [h]		
	0	6	18
0	0.07078275	0.390615917	2.951902833
50	0.07078275	0.503344	1.671259375
200	0.07078275	0.51120875	1.230833375
400	0.07078275	0.3932375	0.570194375

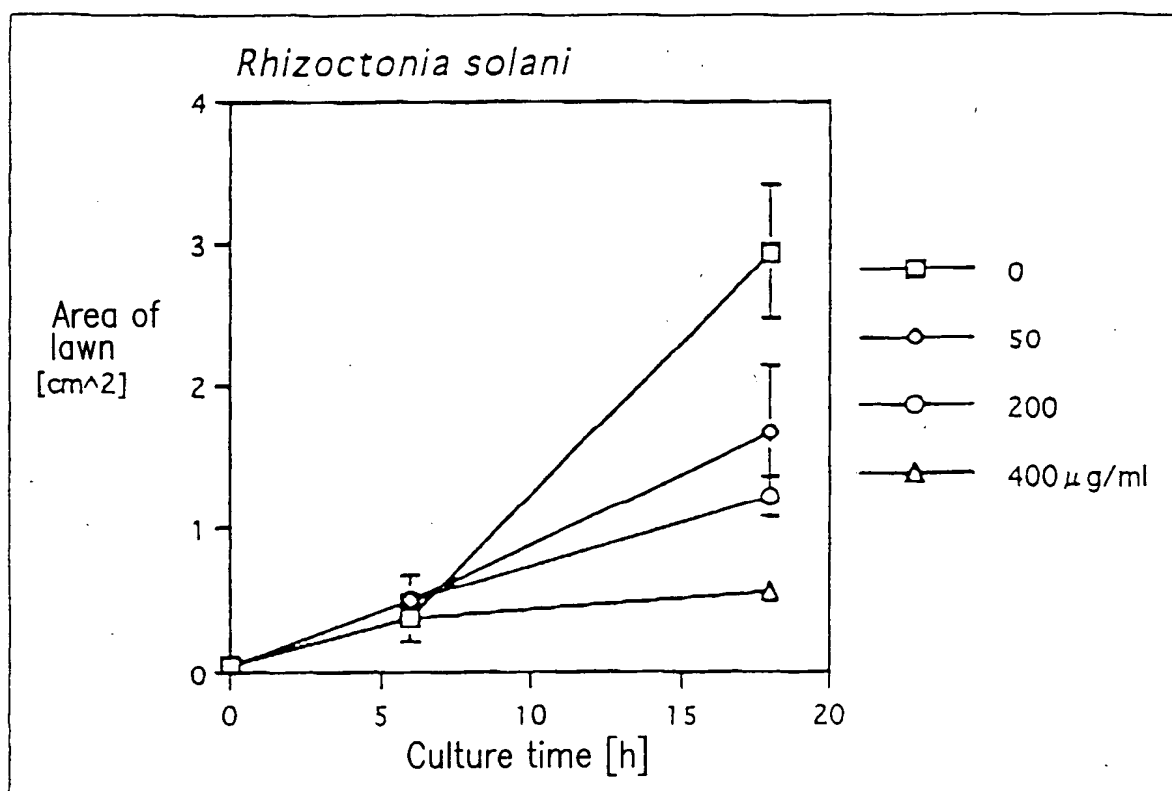
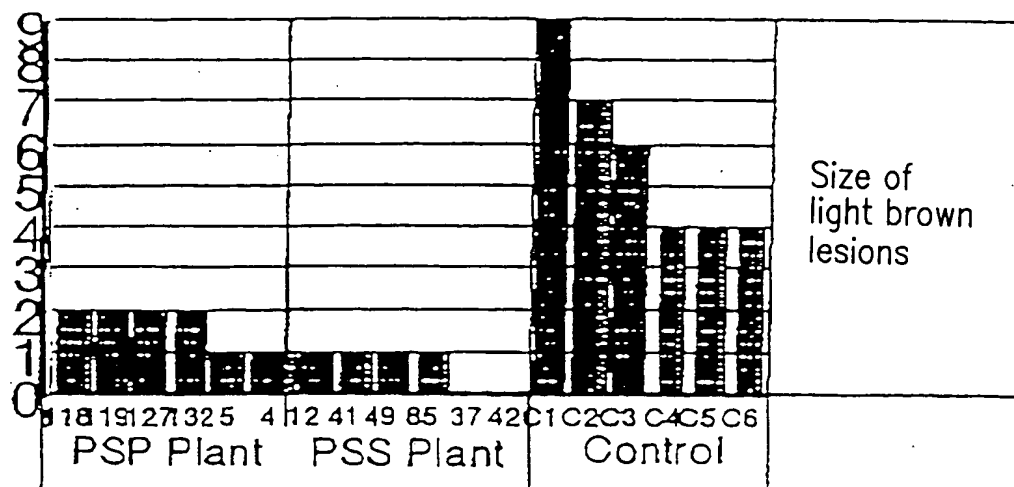


FIG. 15



2025-01-28 10:00:00